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File 4275.2
March 31, 1999

U.S. Nuclear Regulatory Commission
ATTENTION: Document Control Desk
Washington, DC

BRUNSWICK STEAM ELECTRIC PLANT, UNIT NOS. 1 AND 2
DOCKET NOS. 50-325 AND 50-324/LICENSE NOS. DPR-71 AND DPR-62

SHEARON HARRIS NUCLEAR POWER PLANT, UNIT NO. 1
DOCKET NO. 50-400/LICENSE NO. DPR-63

SUBJECT: STATUS REPORT FOR DECOMMISSIONING FINANCIAL ASSURANCE

Dear Sirs/Madam:

North Carolina Eastern Municipal Power Agency (NCEMPA) submits the attached report concerning the status of its financial assurance mechanisms for decommissioning in accordance with 10CFR50.75(c) for its ownership portion of the above referenced nuclear plants which it jointly owns with Carolina Power & Light Company (CP&L). NCEMPA utilizes exclusively the external sinking fund method to provide financial assurance in accordance with 10CFR50.75(e)(1)(ii). These payments are recovered through rates established by the Board of Directors and Board of Commissioners of NCEMPA in accordance with 10CFR50.75(e)(1)(ii)(A).

This transmittal has been included along with that of CP&L as a convenience to the NRC, however, NCEMPA is not responsible for any information contained in CP&L's submittal of their status report. The attachments for NCEMPA are numbered 3 through 8 so as to correspond to those of CP&L for the units jointly owned.

No new commitments are being made in this submittal.

Should you have any questions regarding this matter, please contact Al M. Conyers at (919) 760-6319.

Sincerely,

Al M. Conyers
Chief Financial Officer
Assistant Secretary and Assistant Secretary-Treasurer

Attachment

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PDR ADOCK 05000324
I PDR

Electricities of North Carolina, Inc.

North Carolina Municipal Power Agency Number 1 • North Carolina Eastern Municipal Power Agency
1427 Meadowwood Blvd., Raleigh, North Carolina 27604 • P.O. Box 29513, Raleigh, North Carolina 27626-0513
919/760-6000 • Fax: 919/760-6050 • <http://www.electricities.com>

NORTH CAROLINA EASTERN MUNICIPAL POWER AGENCY SUBMITTAL

Attachment 3 Status of Financial Assurance Mechanism

Brunswick Steam Electric Plant, Unit No. 1 (BNP)
Docket No. 50-325 / License No. DPR-71

The following information is submitted in accordance with 10 CFR 50.75(c):

- Amount of decommissioning funds estimated to be required pursuant to 10 CFR 50.75(b) and (c)

Reactor Type: **BWR**

Thermal Power Rating: **2,558 MWt**

Location of Plant: **Southeast Region of U.S.**

LLW Disposition Preference: **Contract with Waste Vendors**

LLW Burial Location: **South Carolina (assumed)**

Base Cost (1986 Dollars) = \$127,022,000 [from 10 CFR 50.75(c)(1), $\$(104+0.009 \cdot P)$ million]

$L_x = (134.6) \cdot (1.441) / (127.7) = 1.519$ [from NUREG-1307, Revision 8, Table 3.2]

$E_x = 0.939$ [from NUREG-1307, Revision 8, Section 3.2]

$B_x = 6.968$ [from NUREG-1307, Revision 8, Table 2.1]

Decommissioning Cost (1998 Dollars)

$= (\$127,022,000) \cdot [(0.65) \cdot (1.519) + (0.13) \cdot (0.939) + (0.22) \cdot (6.968)]$

= \$335.6 million; NCEMPA Share (18.33%) = \$61.5 million

- Amount accumulated to the end of the calendar year preceding the date of the report

As of December 31, 1998, the fund balance of the Brunswick Unit No. 1 external sinking fund was \$ 21,275,738.

- Schedule of the annual amounts remaining to be collected

See Attachment 4.

- Assumptions

Rate of escalation in decommissioning costs = 4.0%

Rate of escalation in annual payments to decommissioning fund = 4.0%

Rate of earnings on decommissioning funds = 6.0%

- Contracts upon which the licensee is relying pursuant to 10 CFR 50.75 (e)(1)(v)

None

- Modifications occurring to a licensee's current method of providing financial assurance since the last submitted report

None

- Material changes to trust agreements

None

NORTH CAROLINA EASTERN MUNICIPAL POWER AGENCY SUBMITTAL

Attachment 4

Status of Financial Assurance Mechanism

Brunswick Steam Electric Plant, Unit No. 1 (BNP)

Docket No. 50-325 / License No. DPR-71

Schedule of Funding

NRC MINIMUM DECOMMISSIONING COSTS (\$)

Current Year NRC Minimum Costs	61,514,036
NRC Minimum Costs Escalated to License Expiration Date	128,027,188

QUALIFIED TRUST:

Annual Decommissioning Cost Escalation Rate	4.0%
Annual Payments Escalation Rate	4.0%
Interest Earnings Rate	6.0%

<u>Year</u>	<u>Annual Payments (\$)</u>	<u>Interest Earnings (\$)</u>	<u>Ending Fund Balance (\$)</u>
1998			21,275,738
1999	1,595,999	1,324,424	24,196,161
2000	1,659,839	1,501,565	27,357,565
2001	1,726,232	1,693,241	30,777,038
2002	1,795,282	1,900,481	34,472,801
2003	1,867,093	2,124,381	38,464,274
2004	1,941,777	2,366,110	42,772,161
2005	2,019,448	2,626,913	47,418,522
2006	2,100,226	2,908,118	52,426,866
2007	2,184,235	3,211,139	57,822,239
2008	2,271,604	3,537,482	63,631,326
2009	2,362,468	3,888,754	69,882,548
2010	2,456,967	4,266,662	76,606,177
2011	2,555,246	4,673,028	83,834,450
2012	2,657,456	5,109,791	91,601,697
2013	2,763,754	5,579,014	99,944,465
2014	2,874,304	6,082,897	108,901,666
2015	2,989,276	6,623,778	118,514,720
2016	2,331,635 [1]	7,180,832	128,027,188

[1] Nine months' deposits.

NORTH CAROLINA EASTERN MUNICIPAL POWER AGENCY SUBMITTAL

Attachment 5 Status of Financial Assurance Mechanism

Brunswick Steam Electric Plant, Unit No. 2 (BNP)
Docket No. 50-324 / License No. DPR-62

The following information is submitted in accordance with 10 CFR 50.75(c):

- Amount of decommissioning funds estimated to be required pursuant to 10 CFR 50.75(b) and (c)

Reactor Type: **BWR**

Thermal Power Rating: **2,558 MWt**

Location of Plant: **Southeast Region of U.S.**

LLW Disposition Preference: **Contract with Waste Vendors**

LLW Burial Location: **South Carolina (assumed)**

Base Cost (1986 Dollars) = \$127,022,000 [from 10 CFR 50.75(c)(1), $\$(104+0.009 \cdot P)$ million]

$L_x = (134.6) \cdot (1.441) / (127.7) = 1.519$ [from NUREG-1307, Revision 8, Table 3.2]

$E_x = 0.939$ [from NUREG-1307, Revision 8, Section 3.2]

$B_x = 6.968$ [from NUREG-1307, Revision 8, Table 2.1]

Decommissioning Cost (1998 Dollars)

$= (\$127,022,000) \cdot [(0.65) \cdot (1.519) + (0.13) \cdot (0.939) + (0.22) \cdot (6.968)]$

= \$335.6 million; NCEMPA Share (18.33%) = \$61.5 million

- Amount accumulated to the end of the calendar year preceding the date of the report

As of December 31, 1998, the fund balance of the Brunswick Unit No. 2 external sinking fund was \$ 24,075,177.

- Schedule of the annual amounts remaining to be collected

See Attachment 6.

- Assumptions

Rate of escalation in decommissioning costs = 4.0%

Rate of escalation in annual payments to decommissioning fund = 4.0%

Rate of earnings on decommissioning funds = 6.0%

- Contracts upon which the licensee is relying pursuant to 10 CFR 50.75 (e)(1)(v)

None

- Modifications occurring to a licensee's current method of providing financial assurance since the last submitted report

None

- Material changes to trust agreements

None

NORTH CAROLINA EASTERN MUNICIPAL POWER AGENCY SUBMITTAL

Attachment 6

Status of Financial Assurance Mechanism

Brunswick Steam Electric Plant, Unit No. 2 (BNP)

Docket No. 50-324 / License No. DPR-62

Schedule of Funding

NRC MINIMUM DECOMMISSIONING COSTS (\$)

Current Year NRC Minimum Costs	61,514,036
NRC Minimum Costs Escalated to License Expiration Date	119,771,731

QUALIFIED TRUST:

Annual Decommissioning Cost Escalation Rate	4.0%
Annual Payments Escalation Rate	4.0%
Interest Earnings Rate	6.0%

<u>Year</u>	<u>Annual Payments (\$)</u>	<u>Interest Earnings (\$)</u>	<u>Ending Fund Balance (\$)</u>
1998			24,075,177
1999	1,705,355	1,495,671	27,276,203
2000	1,773,569	1,689,779	30,739,551
2001	1,844,511	1,899,708	34,483,771
2002	1,918,292	2,126,575	38,528,637
2003	1,995,024	2,371,569	42,895,230
2004	2,074,825	2,635,959	47,606,013
2005	2,157,818	2,921,095	52,684,926
2006	2,244,130	3,228,419	58,157,476
2007	2,333,895	3,559,465	64,050,836
2008	2,427,251	3,915,868	70,393,955
2009	2,524,341	4,299,368	77,217,664
2010	2,625,315	4,711,819	84,554,798
2011	2,730,328	5,155,198	92,440,324
2012	2,839,541	5,631,606	100,911,470
2013	2,953,122	6,143,282	110,007,874
2014	3,071,247	6,692,610	119,771,731

Attachment 7
Status of Financial Assurance Mechanism

Shearon Harris Nuclear Power Plant, Unit No. 1 (HNP)
Docket No. 50-400 / License No. DPR-63

The following information is submitted in accordance with 10 CFR 50.75(c):

- Amount of decommissioning funds estimated to be required pursuant to 10 CFR 50.75(b) and (c)

Reactor Type: **PWR**

Thermal Power Rating: **2,775 MWt**

Location of Plant: **Southeast Region of U.S.**

LLW Disposition Preference: **Contract with Waste Vendors**

LLW Burial Location: **South Carolina (assumed)**

Base Cost (1986 Dollars) = \$99,420,000 [from 10 CFR 50.75(c)(1), $\$(75+0.0088 \cdot P)$ million]

$L_x = (134.6) \cdot (1.441) / (127.7) = 1.519$ [from NUREG-1307, Revision 8, Table 3.2]

$E_x = 0.955$ [from NUREG-1307, Revision 8, Section 3.2]

$B_x = 7.173$ [from NUREG-1307, Revision 8, Table 2.1]

Decommissioning Cost (1998 Dollars)

$= (\$99,420,000) \cdot [(0.65) \cdot (1.519) + (0.13) \cdot (0.955) + (0.22) \cdot (7.173)]$

= \$267.4 million; NCEMPA Share (16.17%) = \$43.2 million

- Amount accumulated to the end of the calendar year preceding the date of the report

As of December 31, 1998, the fund balance of the Harris external sinking fund was \$ 10,637,869.

- Schedule of the annual amounts remaining to be collected

See Attachment 8.

- Assumptions

Rate of escalation in decommissioning costs = 4.0%

Rate of escalation in annual payments to decommissioning fund = 4.0%

Rate of earnings on decommissioning funds = 6.0%

- Contracts upon which the licensee is relying pursuant to 10 CFR 50.75 (e)(1)(v)

None

- Modifications occurring to a licensee's current method of providing financial assurance since the last submitted report

None

- Material changes to trust agreements

None

NORTH CAROLINA EASTERN MUNICIPAL POWER AGENCY SUBMITTAL

Attachment 8

Status of Financial Assurance Mechanism

Shearon Harris Nuclear Power Plant, Unit No. 1 (HNP)

Docket No. 50-400 / License No. DPR-63

Schedule of Funding

NRC MINIMUM DECOMMISSIONING COSTS (\$)

Current Year NRC Minimum Costs	43,245,016
NRC Minimum Costs Escalated to License Expiration Date	133,884,273

QUALIFIED TRUST:

Annual Decommissioning Cost Escalation Rate	4.0%
Annual Payments Escalation Rate	4.0%
Interest Earnings Rate	6.0%

<u>Year</u>	<u>Annual Payments (\$)</u>	<u>Interest Earnings (\$)</u>	<u>Ending Fund Balance (\$)</u>
1998			10,637,869
1999	745,667	660,642	12,044,178
2000	775,494	745,915	13,565,587
2001	806,513	838,131	15,210,231
2002	838,774	937,777	16,986,782
2003	872,325	1,045,377	18,904,484
2004	907,218	1,161,486	20,973,187
2005	943,507	1,286,696	23,203,390
2006	981,247	1,421,641	25,606,278
2007	1,020,497	1,566,992	28,193,766
2008	1,061,317	1,723,465	30,978,548
2009	1,103,769	1,891,826	33,974,143
2010	1,147,920	2,072,886	37,194,949
2011	1,193,837	2,267,512	40,656,298
2012	1,241,590	2,476,626	44,374,514
2013	1,291,254	2,701,208	48,366,976
2014	1,342,904	2,942,306	52,652,186
2015	1,396,620	3,201,030	57,249,836
2016	1,452,485	3,478,565	62,180,886
2017	1,510,584	3,776,171	67,467,641
2018	1,571,008	4,095,189	73,133,837
2019	1,633,848	4,437,046	79,204,731
2020	1,699,202	4,803,260	85,707,193
2021	1,767,170	5,195,447	92,669,810
2022	1,837,857	5,615,324	100,122,991
2023	1,911,371	6,064,721	108,099,082
2024	1,987,826	6,545,580	116,632,488
2025	2,067,339	7,059,969	125,759,797
2026	1,791,694 [1]	6,332,782	133,884,273

[1] Ten months' deposits.